

#### Overview of Revised Guidelines for Voluntary Reporting of Greenhouse Gases [1605(b)]



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Mark Friedrichs Office of Policy and International Affairs U.S. Department of Energy mark.friedrichs@hq.doe.gov



#### **Briefing Outline**

- Background program, revision process, next steps
- **Overview of Revised Guidelines**





#### 1605(b) Program Background

- Established by section 1605(b) of Energy Policy Act of 1992.
- Flexible implementing guidelines issued 1994.
- Over 200 regular reporters.
- Reports on thousands of projects submitted.



On February 14, 2002, the President directed the Secretary of Energy, working with the Secretaries of Commerce and Agriculture, and the Administrator of the Environmental Protection Agency, to propose improvements to the current greenhouse gas registry to

"...enhance measurement accuracy, reliability and verifiability, working with and taking into account emerging domestic and international approaches."

- 1. Reduce U.S. greenhouse gas emissions intensity 18% by 2012.
- 2. Improve DOE's voluntary GHG reporting program.
- 3. Develop recommendations for protecting real reductions against future climate policy and on giving transferable credits.
- 4. Challenge businesses to take action (Climate VISION, Climate Leaders).





#### **Revision Process – Laying the groundwork**

- Established interagency working groups.
- Issued a public Notice of Inquiry, May 2002.
- Held workshops; Met with stakeholder groups.
- Proposed General Guidelines, December 2003.





#### Revision Process – 2005 and 2006

- March 24, 2005: Interim Final General and Draft Technical Guidelines published in Federal Register for comment.
- April 26/27 and May 5: Public workshops.
- June 22: Comment period to be extended.
- September 20: Guidelines become effective [unless extended].
- Fall 2005: EIA issues forms (after public review).
- GREENHOUSE GASES

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# **Basic Elements of General Guidelines Have Not Changed from December 2003 Proposal**

#### Focus on Registering Reductions, requiring:

- Entity-wide reporting -- for both inventories and reductions
- Inventories of all gases and sequestration
- Post-2002 reductions
- Reductions derived primarily from emissions intensity and related measures

Small Emitters may limit reports to single activity.





# Changes to the General Guidelines since the December 2003 Proposal

- **Q** International emissions and emission reductions can be reported.
- **Q** A **quality rating system** has been added for inventories.
- **Q** The *de minimis* provision has been modified to eliminate 10,000 tonnes of CO2 equivalent maximum.
- **More detailed requirements** for defining reporting entities and preparing Entity Statements, conducting inventories and calculating reductions.





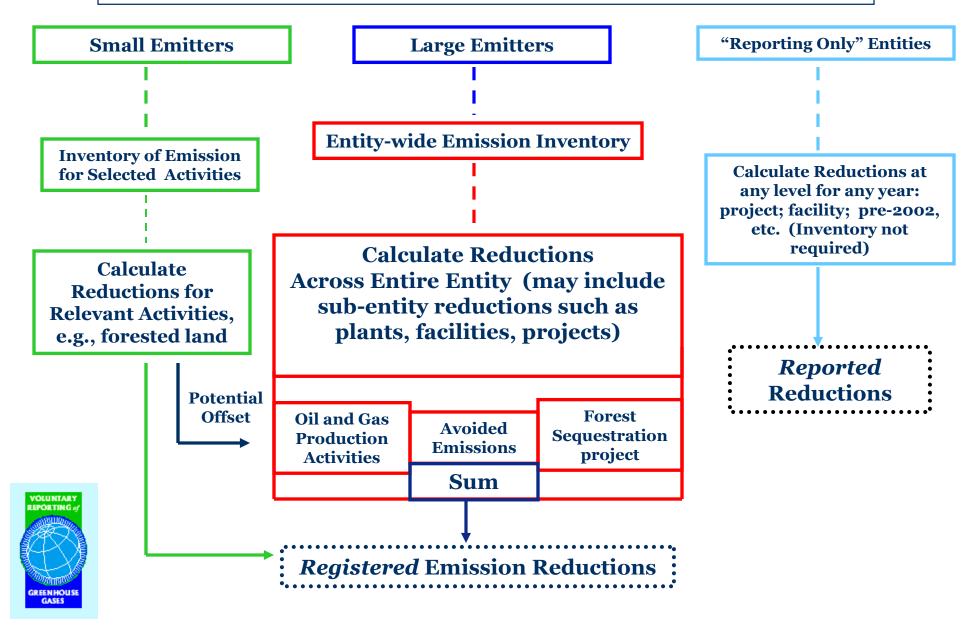
# **Key Elements of Draft Technical Guidelines**

- © Emissions inventory methods for all main sources, with quality ratings.
- Reduction calculation methods including:
  - Subentities
  - @ Base periods and base values
  - Method-specific guidance, including special methods for electricity generators and users



#### Framework of Revised Program

All Reporters: Require Legal Basis for Entity; 'Encourage' Highest Level





#### **Basic Elements of the Revised 1605b Guidelines**

- <u>Defining and Naming the Entity, and Setting Organizational</u> <u>Boundaries</u>
- Determining Start Year, Base Period and First Reduction Year
- Entity Statements
- Emissions Inventories
- Emission Reductions
- Other Reporting Requirements, including Record Keeping, Certification and Verification
- Offsets, Non-U.S. Emissions, Aggregators, Other Gases and Sources





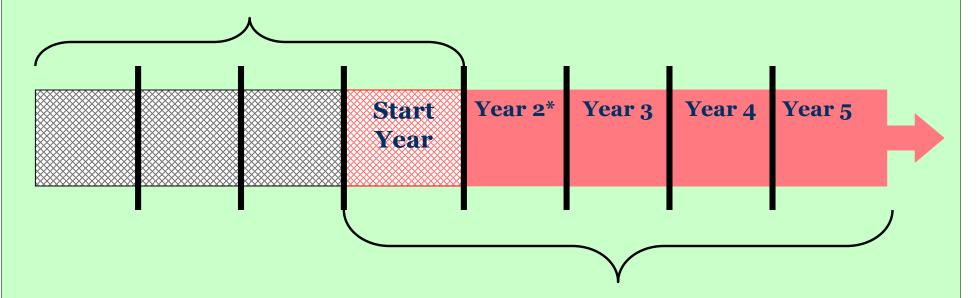
# Defining and Naming the Entity, and Setting Organizational Boundaries

- © Companies are encouraged to report at highest level of aggregation.
- Reporting entities must have a legal basis and be named appropriately.
- © Entities that register reductions must define an organizational boundary.
- © Entities should use "financial control" to determine boundary.
- The same approach should be used to determine non-U.S. boundaries (if any).



#### **Determining Start Year, Base Period & First Reduction Year**

Base Periods may be 1-4 years. The initial Base Period ends with the "Start Year."



The Start Year is the first Reporting Year. For registering reductions, the Start Year must be 2002 or later.

\* Year 2 is the first Reduction Year.

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# **Entity Statements – Basic Requirements for All Reporters**

- Q Name, Legal Basis and Start Year.
- Q Summary description of sources (including <u>de minimis</u> sources) and basis for Organizational Boundary.
- Names of any parent or holding companies NOT covered in inventory.
- Names of any large subsidiaries or organizational units covered in inventory.
- Q Description of the entity and its primary U.S. economic activities.
- Q Description of non-U.S. operations (if included).
- © Certification that jointly-owned sources are not "double-counted."
- Significant changes from previous report need to be documented.





#### **Entity Statements - Additional Requirements for Large and Small Emitters**

#### Q Large Emitters:

- The Start Year is the first year for which a complete inventory is submitted.
- Must continue to report as Large Emitter in all future years.

#### © Small Emitters:

- **Q** Must demonstrate annual emissions  $\leq$  10,000 MMT CO<sub>2</sub>e.
- Must use methods specified in the Technical Guidelines or the Simplified Emission Inventory Tool (SEIT).





#### **Emissions Inventories**

- Q Large emitters that register reductions must submit entity-wide inventories annually, including:
  - Q Direct emissions of all six GHG categories.
  - @ Certain indirect emissions, such as purchased electricity.
  - **Q** All sequestration or other changes in carbon stocks.
- Quantity-weighted quality rating of inventory must be 3.0 or more.
- **@** May exclude <u>de minimis</u> sources if  $\leq 3\%$  of annual emissions.
- Omestic and international emissions must be reported separately.
- Q All reporters must quantify emissions associated with reported reductions.



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#### **Emissions Inventory - The Emissions Rating System**

- Reporters must "rate" their emissions measurement and estimation methods.
- The ratings are ordinal, with four levels, A, B, C & D (valued 4, 3, 2, 1).
- An "A" rated method = best method available (e.g. Direct Measurement).
- A "D" rated method = least rigorous method (e.g. estimated activity data).
- 9 The weighted average rating must be  $\geq$  to 3.0 to register reductions.



Reporters must calculate an inventory weighted average rating for each year.



#### **Emissions Inventory - Measuring Emissions**

- When choosing measurement or estimation methods, entities should consider:
  - Availability of information
  - Cost and feasibility
  - Accuracy (rating)
  - Size of the source
  - Ability to measure reductions
  - Variability and performance over time, and
  - Ancillary Benefits.





# **Emissions Inventory – Potential Sources of Emission** and Sequestration

- Stationary Source Combustion
- Mobile Source Combustion
- Non-Fuel Use of Fossil Fuels
- Industrial Process Emissions
- Mining, Oil, and Gas Production Emissions
- Waste Treatment and Handling
- Indirect Emissions from Purchased Electricity, Steam, Hot and Chilled Water
- Other Indirect Emissions
- Forestry Sources and Sinks
- <u>Agricultural Sources and Sinks</u>
- <u>Engineered Sequestration</u>





#### **Emission Reductions**

- Registered reductions based on assessment of all changes in emissions relative to Base Period(s).
- The Technical Guidelines permit five calculation methods:
  - @Emissions Intensity
  - **@**Absolute Emissions
  - **@**Changes in Carbon Stocks
  - **@**Changes in Avoided Emissions
  - @Action-Specific (Project Based)
- Annual increases must be subtracted from future year reductions.





#### **Emission Reductions – Geologic Sequestration**

- Q Action-specific method
- Must demonstrate permanent geologic sequestration
- © Entities that capture and transfer CO2, must report transfer
- Agreements between entities that capture and entities that sequester will be needed.





# **Record Keeping, Certification and Other Requirements**

- Records must be maintained for at least three years.
- Trade secret and confidential business information may be protected (5 U.S.C. 552(b)(4)).
- All reports submitted to EIA must be certified as:
  - Accurate and complete
  - Compiled in accordance with the Guidelines, and
  - Consistent with information submitted in prior years.
- <u>Independent verification</u> is encouraged, but not required.





#### **Independent Verification**

- Entities encouraged to have reports independently verified.
- Verifiers may not be owned by the reporter, nor provide additional services.
- Independent verifiers should have following qualifications:
  - Accredited by independent, nationally-recognized accreditation program(s).
  - Possess education, training and/or experience matching tasks performed.
  - Have a professional degree or accreditation in relevant fields, supplemented by training and/or experience in emissions reporting and accounting.
- A few nationally recognized organizations that accredit individual verifiers include, but are not limited to the following:
  - American Institute of Certified Public Accountants
  - ANSI's Registrar Accreditation Board for Environmental System Auditors
  - Board of Environmental, Health and Safety Auditor Certifications
  - © California Climate Action Registry
  - © Comparable international bodies







#### Offsets, Non-U.S. Emissions, Other Gases and Sources

- Registering Offset Reductions
- Q Aggregators
- **@** International emissions and reductions
- Other gases and sources





#### **Registering Offset Reductions**

- Q A reporting entity (or aggregator) may register reductions achieved by third parties.
- Third parties must meet same requirements as reporters (e.g. large emitters must report entity-wide; but small emitters may limit report to single activity).
- The third party must certify that reporting entity should be recognized as entity responsible for reductions.
- Net emission reductions and increases by third party will be included in entity's report, but will remain distinct.





### **Aggregators**

- Quantities Aggregators may register reductions achieved by third parties (offset reductions).
- If the aggregator is a small emitter, it may report ONLY offset reductions [with no report on its own emissions/activities].
- The aggregator and the third parties that generate the offset reductions must both certify the completeness/accuracy of their reports.
- The aggregator is the entity recognized for the registered reductions.





#### **International Emissions and Reductions**

- Non-U.S. emissions and reductions may be reported, but only if U.S. emissions and reductions are also reported.
- The U.S. means the 50 States, D.C., Puerto Rico, and other U.S. territories.
- The countries in which economic activities occur must be identified (if included in report), and the activities in each country must be treated as a separate subentity.
- In general, all non-U.S. activities must be reported following the same rules applicable to U.S. entities.





#### **Other Gases and Sources**

- Entities that register reductions must use the measurement and estimation techniques identified in the technical guidelines to report:
  - Direct emissions of the six categories of greenhouse gases identified in the guidelines (and recognized internationally)
  - Indirect emissions associated with purchase of electricity, steam and hot/chilled water
- Entities MAY report other indirect emissions, but only if they use methods identified in the technical guidelines.
- Other gases may only be reported if DOE agrees that the emission meets the definition of greenhouse gases and has established an acceptable measurement or estimation method in its Technical Guidelines.
- Reductions of other gases may be registered only if the gases have been added to the list of covered gases included in the General Guidelines.



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### Private markets may (or may not):

- Create real economic value for Registered Reductions (or other reductions)
- Trade Registered Reductions through private contracts.
- © Create market trading mechanism that tracks trades.

But neither private markets, nor government agencies, can provide assurance that registered reductions will be given real regulatory (or economic value) in future.





#### Why Report?

- ♦ To demonstrate the results of your entity's commitment to reducing greenhouse gas emissions.
- ◆ To establish an official, government record of entity emissions and reductions.
- To initiate a comprehensive program of greenhouse gas emission monitoring and management.
- To document emission reductions that might be recognized by future government policies or programs.





### **Key Addresses**

### All documents, including public comments, plus Links to workshop registration:

• http://www.pi.energy.gov/enhancingGHGregistry/

#### Send public comments (or questions) to:

• 1605bGuidelines.Comments@hq.doe.gov